

**Alaska Energy Authority & Denali Commission  
Emerging Energy Technology Fund Progress Report**

**Grant Number:** 74310049

**Project Title:** Small Community Self Regulating Grid – Tuntutuliak

**Grantee:** Intelligent Energy Systems

**Reporting Period:** July 1 to September 30, 2014

**Deliverables Submitted:** No Deliverables this quarter

**Budget:** Project remains on budget and within the limits of the revised schedule.

**Schedule Status:** Instrumentation is 50% installed.

**Percent Complete:** 55% project completion overall.

Miles tone	Task		Deliverables	Progress Status
	1	Purchase components for controller upgrades and software license		100% Complete
	2	Complete controller programming for prototype		85% Complete
	3	Test single ETS unit controller for frequency response at ACEP test facility	1. ACEP test results	100% complete. Final report from UAF/INE complete
	4	Develop system instrumentation plan	2. System one line, & 3. Instrumentation Plan	100% complete
	5	Purchase data collection instrumentation		100% complete
	6	Install data collection instrumentation, and baseline data collection	4. Estimated installation costs	50% complete
	7	Purchase installation and commissioning components		100% complete
	8	3-phase load balancing system		In progress
	9	Install and commission SRG system	5. Commissioning report installations	
	10	Monitor system in centralized and distributed frequency controls modes and optimize system efficiency		
	11	Economic analysis on stove consumption	6, Economic analysis	In progress with ISER
	12	Data evaluation and draft project report	7. Draft project report	
	13	Final project report	8. Final report	

**Work Progress:** Worked with TCSA board and manager as they deliberated ETS locations. Stove locations were finalized and work was begun on the installation. Conducted several meeting with Steffes and Programmer to map out the logic and strategies for the Multi-Unit Controller and for the System Master Controller.

**Future Work:** Finish installation of monitoring equipment, baseline power quality studies, and implementation of data collection and reporting system. Commissioning will begin as soon as the programming can be completed. Also, the Estimated Installation Costs Deliverable will be prepared and submitted.